

REMARKS/ARGUMENTS

After the foregoing Amendment, Claims 1 - 20 are currently pending in this application. Claims 11 - 20 are withdrawn from consideration without prejudice to the filing of a divisional application. Claim 1 has been amended to more distinctly claim subject matter which the Applicant regards as the invention. Applicant submits that no new matter has been introduced into the application by these amendments.

Election/Restriction

The Examiner restricted the claims into the following groups:

- I. Claims 1 - 10, drawn to a method for producing a closed metal profile or metal tube, classified in class 228, subclass 173.6;
- II. Claims 11 - 20, drawn to a roll-forming system, classified in class 29, subclass various.

Applicant affirms the telephonic election made on October 14, 2005, with traverse, of group I, claims 1 - 10.

A restriction requirement based on distinction is proper if the inventions are distinct and a serious burden on the Examiner exists in examining the application. Applicant respectfully submits that no serious burden exists in examining all of the

claims in the application. The inventions in groups I and II, as separated by the Examiner, are so inter-related as to require a same field of search. Consequently, no serious burden exists. As such, examination of all of the pending claims together would be more efficient than separating the claims for examination in different applications.

Claim Rejections - 35 USC §103

Claims 1 - 5 were rejected in the Action under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 4,603,806 to Watanabe in view of U.S. Patent No. 5,720,195 to Ruple.

Applicant respectfully traverses the rejection. The present invention is a method for producing a closed metal profile or metal tube, having a wall thickness that varies along a longitudinal axis thereof, comprising shaping a sheet-metal strip, with a strip thickness that varies along a length thereof into a profile or tube by roll-forming, sizing the profile or tube in at least one sizing roller pair to predetermined outer dimensions, and welding edges of the sheet-metal strip that are brought together through the shaping and sizing to one another in order to complete the closed profile or tube.

Watanabe describes a process for producing a tube having a variable wall thickness along its longitudinal axis. Watanabe fails to teach several claim

limitations. First, Watanabe does not teach the claim limitation of shaping a sheet-metal strip, with a strip thickness that varies along a length thereof into a profile or tube by roll-forming, and sizing the profile or tube in at least one sizing roller pair to predetermined outer dimensions. Second, Watanabe does not allow for a continuous process; rather the process of Watanabe teaches a plate that is shaped in a punch and die, and finished in a crimping process, to form a tube of a predetermined length. The shaped tube is then trimmed lengthwise along its walls prior to welding. This allows a small diameter to be able to be calibrated.

These are fundamental differences between Watanabe and the present invention since the tube of Watanabe is formed widthwise in individual segments as opposed to lengthwise by **roll forming** as claimed. One of ordinary skill in the art is aware that roll forming relates to a continuous bending operation in which sheet or strip metal is gradually formed in tandem sets of rollers until the desired cross-sectional configuration is obtained. Roll forming is ideal for producing parts with long lengths or in large quantities.

Further, the combination of Watanabe with Ruple is improper. Ruple teaches a roll forming machine for the continuous production of tubes. Ruple specifically deals with a roll forming assembly in which roll forming tools are easily exchangeable by a pivotable holder. This allows for the production of tubes of various sizes by exchanging the roll forming tools.

Watanabe is not properly combinable with Ruple since Watanabe teaches a process for producing a tube from a plate using a punch and die and Ruple teaches a roll forming machine able to exchange work pieces. It is well settled that the prior cannot be modified to render a claimed invention obvious unless there is something in the prior art to suggest the desirability of making such a modification. *In re Laskowski*, 10 USPQ2d 1397, 1398 (Fed.Cir. 1980). A rejection based on Section 103 must rest on a factual basis, with the facts being interpreted without hindsight reconstruction of the invention from the prior art.

The initial duty is on the USPTO to supply the factual basis for the rejection advanced. It is not permissive because of doubts that the invention is patentable, to resort to speculation, unfounded assumptions, or hindsight reconstruction to supply deficiencies in the factual basis. *Ex parte Havmond*, 41 USPQ2d 1217 (BdPatApp&Int 1996). That is, there must be some logical reason apparent from positive, concrete evidence of record which justifies a suggestion to modify a prior art structure. See *In re Regel*, 188 USPQ 136, 139 (CCPA 1975). No such evidence to combine the references was provided in this case, which merely combined the two references after reviewing the claimed subject matter.

Additionally, even if the references could be combined as suggested in the Action, the combination still fails to show the method of the claimed invention since neither teach sizing rollers to size the tube to a predetermined outer dimension.

Applicant: Gerhard Spitz
Application No.: 10/822,628

Based on the arguments presented above, withdrawal of the §103 rejection of claims 1 - 5 is respectfully requested.

Claims 6 - 10 were rejected in the Action under 35 U.S.C. § 103(a) as obvious over Watanabe and Ruple and further in view of U.S. Patent No. 4,047,411 to Foster.

Claims 6 - 10 depend from claim 1 and are believed to be allowable for at least the reasons stated above. Furthermore, Foster fails to remedy the deficiencies of Watanabe and Ruple. Based on the arguments presented above, withdrawal of the § 103 rejection of claims 6 - 10 is respectfully requested.

Conclusion


If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

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In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application, including claims 1 - 10, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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